

Mr. Leo A. Visser
Chemtrusion Indiana, Inc.
1403 Port Road
Jeffersonville, IN 47130

Re: **019-11926**
First Significant Revision to
FESOP 019-9668-00091

Dear Mr. Visser:

Chemtrusion Indiana, Inc. was issued a permit on November 9, 1998 for a polypropylene plastic extrusion source. A letter requesting changes to this permit was received on February 23, 2000. Pursuant to the provisions of 326 IAC 2-8-11.1, a Significant Permit Revision to this permit is hereby approved as described in the attached Technical Support Document. The source is adding additional polypropylene resin extrusion and batch mixing equipment to their existing plant. The modification consists of construction and operation of the following emission units and pollution control devices:

- (a) One (1) extruder, identified as EX8, with a maximum capacity of 3,300 pounds per hour, exhausting at a stack identified as E;
- (b) One (1) extruder, identified as EX7, with a maximum capacity of 12,000 pounds per hour, exhausting at a stack identified as E;
- (c) Two (2) preblending operations identified as PB 4 and PB5, each with a maximum capacity of 175 pounds of additives and pigments per hour, with particulate matter (PM) controlled a dust collector identified as PS012, exhausting at a stack identified as H;
- (d) One (1) automatic feeder system, identified as AFS2, which receives raw material as additive, pigments, polypropylene resin, rubber, and talc at a maximum rate of 75, 75, 9900, 3100 and 2100 pounds per hour, respectively, with particulate matter controlled by a dust collector identified as PS011, exhausting at a stack identified as G;
- (e) One (1) pelletizing process identified as P8, with a maximum capacity of 3,300 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D; and
- (f) One (1) pelletizing process identified as P7, with a maximum capacity of 12,000 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D.

The following insignificant activities are also being added, which are similar to existing insignificant activities and are not specifically subject to a rule:

- (a) Natural gas-fired combustion sources (space heaters) with heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- (b) Cleaners and solvents characterized as follows:

- (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF); or
- (2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (c) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (d) Enclosed systems of conveying plastic raw materials and plastic finished goods.
- (e) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

Chemtrusion Indiana, Inc.
Jeffersonville, Indiana

Page 3 of 3
SFR 019-11926-00091

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Ortolani, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

CAO/MES
Attachments

cc: File - Clark County
U.S. EPA, Region V
Air Compliance Section Inspector - Joe Foyst
Compliance Data Section - Mendy Jones
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
and ENHANCED NEW SOURCE REVIEW (ENSR)
OFFICE OF AIR MANAGEMENT**

**Chemtrusion Indiana, Inc.
1403 Port Road
Jeffersonville, Indiana 47130**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F019-9668-00091	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: November 9, 1998
First Significant Permit Revision: SPR 019-11926-00091	Pages Affected: 3 becomes 3a and 3b; 5 becomes 5a and 5b; 28; 31a, 31b, 31c and 31d added; 35a added.
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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- D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]
- D.3.6 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.3.7 Visible Emissions Notations
- D.3.8 Parametric Monitoring
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- D.3.10 Dust Collector Failure Detection

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- (7) One (1) extruder identified as EX6 contains different heat zones for polymerization of raw materials, maximum capacity of 6000 pounds per hour, exhausting at a stack identified as E;
- (8) One (1) pelletizing process identified as P1 with a maximum capacity of 330 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (9) One (1) pelletizing process identified as P2 with a maximum capacity of 1500 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (10) One (1) pelletizing process identified as P3 with a maximum capacity of 1500 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (11) One (1) pelletizing process identified as P5 with a maximum capacity of 3300 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents, exhausting to a stack identified as F;
- (12) One (1) pelletizing process identified as P6 with a maximum capacity of 6000 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents, exhausting to a stack identified as F;
- (13) One (1) extruder identified as EX4 contains different heat zones for polymerization of raw materials, maximum capacity of 3500 pounds per hour, exhausting at a stack identified as E;
- (14) One (1) pelletizing process identified as P4 with a maximum capacity of 3500 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (15) One (1) extruder, identified as EX8, with a maximum capacity of 3,300 pounds per hour, exhausting through the general ventilation;
- (16) One (1) extruder, identified as EX7, with a maximum capacity of 12,000 pounds per hour, exhausting through the general ventilation;
- (17) Two (2) preblending operations identified as PB 4 and PB5, each with a maximum capacity of 175 pounds of additives and pigments per hour, with particulate matter (PM) controlled a dust collector identified as PS012, exhausting at a stack identified as H;
- (18) One (1) automatic feeder system, identified as AFS2, which receives raw material as additive, pigments, polypropylene resin, rubber, and talc at a maximum rate of 75, 75, 9900, 3100 and 2100 pounds per hour, respectively, with particulate matter controlled by a dust collector identified as PS011, exhausting at a stack identified as G;
- (19) One (1) pelletizing process identified as P8, with a maximum capacity of 3,300 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting through the general ventilation; and
- (20) One (1) pelletizing process identified as P7, with a maximum capacity of 12,000 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting through the general ventilation.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Space heaters, process heaters, or boilers using the following fuels.
 - (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (i) Three (3) natural gas fired process heaters identified as OF₁ to OF₃, each rated at 1.20 million British thermal units (mmBtu/hr).
- (2) Cleaners and solvents characterized as follow:
 - (A) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.30 psi measured at 38 degrees C (100⁰ F) or;
 - (B) having a vapor pressure equal to or less than 0.70 kPa; 5 mm Hg; or 0.10 psi measured at 20⁰ C (68⁰ F);

The use of which for all cleaners and solvents combined does not exceed 145 gallons per months.

pounds per hour, the following equation is used:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Process / Facility	Process Weight Rate (tons/hour)	Truncated PM Allowable Emissions (lbs./hr)	PM ₁₀ Allowable Emissions (lbs./hr)
Preblending Operation (PB1)	0.0825	0.22	0.22
Preblending Operation (PB2)	0.0825	0.22	0.22
Preblending Operation (PB3)	0.0825	0.22	0.22
Automatic Feeder System (AFS)	8.03	4.07	4.07
Pelletizing Operation (P1)	0.165	0.14	0.14
Pelletizing Operation (P2)	0.75	0.65	0.65
Pelletizing Operation (P3)	0.75	0.65	0.65
Pelletizing Operation (P4)	1.75	1.50	1.50
Pelletizing Operation (P5)	1.65	1.42	1.42
Pelletizing Operation (P)	3.0	2.59	2.59

The above PM emission limits shall also equivalent to PM₁₀ emission limits. Compliance with this condition will make 326 IAC 2-7 (Part 70 Program) requirements not applicable.

Compliance Determination Requirements

D.1.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

During the period between 12 and 18 months after issuance of this permit, the Permittee shall perform PM-10 testing of an automatic feeder system (AFS) utilizing Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Compliance with the PM₁₀ limit shall be determined by a performance test conducted in accordance with Section C - Performance Testing. PM-10 includes filterable and condensable PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the automatic feeder system (AFS) is in compliance.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.3 Particulate Matter (PM)

The baghouses identified as PS009 and PS010 for PM control shall be in operation at all times when the preblending operation (PB1, PB2, PB3) and automatic feeder system (AFS) are in operation and exhausting to the outside atmosphere.

D.1.4 Visible Emissions Notations

(a) Daily visible emission notations of the preblending & automatic feeder system

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (15) One (1) extruder, identified as EX8, with a maximum capacity of 3,300 pounds per hour, exhausting through the general ventilation;
- (16) One (1) extruder, identified as EX7, with a maximum capacity of 12,000 pounds per hour, exhausting through the general ventilation;
- (17) Two (2) preblending operations identified as PB 4 and PB5, each with a maximum capacity of 175 pounds of additives and pigments per hour, with particulate matter (PM) controlled a dust collector identified as PS012, exhausting at a stack identified as H;
- (18) One (1) automatic feeder system, identified as AFS2, which receives raw material as additive, pigments, polypropylene resin, rubber, and talc at a maximum rate of 75, 75, 9900, 3100 and 2100 pounds per hour, respectively, with particulate matter controlled by a dust collector identified as PS011, exhausting at a stack identified as G;
- (19) One (1) pelletizing process identified as P8, with a maximum capacity of 3,300 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting through the general ventilation; and
- (20) One (1) pelletizing process identified as P7, with a maximum capacity of 12,000 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting through the general ventilation.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 FESOP [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP), the PM₁₀ from the following facilities shall be limited as follows:

Process / Facility	PM ₁₀ Limited Emissions (lbs./hr)
Preblending Operation (PB4)	0.22
Preblending Operation (PB5)	0.22
Automatic Feeder System (AFS2)	3.88
Pelletizing Operation (P7)	5.17
Pelletizing Operation (P8)	1.42

Compliance with this condition will make the requirements of 326 IAC 2-7 (Part 70 Program) not applicable.

D.3.2 Process Operations [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the following facilities shall not exceed the following pounds per hour limitations when operating at the process weight rate indicated:

Process / Facility	Process Weight Rate (tons/hr)	PM Allowable Emissions (lbs/hr)
Preblending Operation (PB4)	0.09	0.80
Preblending Operation (PB5)	0.09	0.80
Automatic Feeder System (AFS2)	7.65	16.0
Pelletizing Operation (P7)	6.00	13.6
Pelletizing Operation (P8)	1.65	5.73

These limitations are based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour, the following equation is used:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The Permittee shall limit the input of raw materials to the one (1) extruder, identified as EX7, to less than 49,932 tons per consecutive twelve (12) month period. This will limit the potential to emit VOC at the one (1) extruder, identified as EX7, to less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6, New facilities; General reduction requirements, are not applicable.

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the automatic feeder system, identified as AFS2, and its control device and the one (1) extruder, identified as EX7.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and PM₁₀ limits specified in Conditions D.3.1 and D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.6 Particulate Matter (PM)

The dust collector identified as PS011 for PM control shall be in operation at all times when the automatic feeder system (AFS2) is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.7 Visible Emissions Notations

- (a) Daily visible emission notations of the automatic feeder system (AFS2) stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector (PS011) used in conjunction with the automatic feeder system (AFS2), at least once weekly when the automatic feeder system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 3.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading. OAM, and shall be calibrated at least once every six (6) months.

D.3.9 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all filters controlling the automatic feeder system (AFS2) when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.3.10 Dust Collector Failure Detection

In the event that a dust collector failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (b) For single compartment dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-5(3)] [326 IAC 2-8-19]

D.3.11 Record Keeping Requirements

- (a) To document compliance with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of the automatic feeder system stack exhaust.
- (b) To document compliance with Condition D.3.8, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure
 - (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.3.9, the Permittee shall maintain records of the results of the inspections required under Condition D.3.9 and the dates the vents are redirected.
- (d) The Permittee shall keep records of the material throughput at the one (1) extruder, identified as EX7, on a monthly basis.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Chemtrusion Indiana, Inc.
Source Address: 1403 Port Road, Jeffersonville, Indiana 47130
Mailing Address: 1403 Port Road, Jeffersonville, Indiana 47130
FESOP No.: F 019- 9668- 00091
Facility: One (1) extruder, identified as EX7
Parameter: Raw material input
Limit: 49,932 tons per consecutive twelve (12) month period (VOC emissions less than 25 tons per year)

YEAR: _____

Month	This Month		Previous 11 Months		12 Month Total	
	Material throughput	VOC Emissions	Material throughput	VOC Emissions	Material throughput	VOC Emissions

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Name:	Chemtrusion Indiana, Inc.
Source Location:	1403 Port Road, Jeffersonville, Indiana 47130
County:	Clark
FESOP:	F 019-9668-00091
SIC Code:	4459
Permit Reviewer:	CarrieAnn Ortolani

On April 27, 2000, the Office of Air Management (OAM) had a notice published in the Evening News, Jeffersonville, Indiana, stating that Chemtrusion Indiana, Inc. had applied for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP) to operate additional polypropylene resin extrusion and batch mixing equipment at their existing plant with dust collectors as control. The notice also stated that OAM proposed to issue a Significant Permit Revision to a FESOP for this operation and provided information on how the public could review the proposed Significant Permit Revision to a FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Permit Revision to a FESOP should be issued as proposed.

On May 30, 2000, Evelyn Crooks, on behalf of Chemtrusion Indiana, Inc. submitted comments on the proposed Significant Permit Revision to a FESOP. The comments are as follows (The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.):

Comment 1:

Page 5a, A.2(15) & (16), These units are exhausted through general ventilation.

Response 1:

See response 2.

Comment 2:

Page 5a, A.2(19) & (20), These units are exhausted through general ventilation.

Response 2:

Section A.2 (15), (16), (19) and (20) and the Facility Descriptions in Section D.3 have been revised as follows:

- (15) One (1) extruder, identified as EX8, with a maximum capacity of 3,300 pounds per hour, exhausting **through the general ventilation** ~~at a stack identified as E;~~

- (16) One (1) extruder, identified as EX7, with a maximum capacity of 12,000 pounds per hour, exhausting **through the general ventilation at a stack identified as E**;
- (19) One (1) pelletizing process identified as P8, with a maximum capacity of 3,300 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting **through the general ventilation at a stack identified as D**; and
- (20) One (1) pelletizing process identified as P7, with a maximum capacity of 12,000 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting **through the general ventilation at a stack identified as D**.

Comment 3:

Page 31a, D.3, Exhaust notations need to agree with A.2.

Response 3:

See response 2.

Comment 4:

Page 31c, D.3.9, There is no shot blasting activity at the source. This reference must be removed.

Response 4:

The error in Condition D.3.9 is corrected as follows:

D.3.9 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all filters controlling the **automatic feeder system (AFS2)** ~~shot blasting operations~~ when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Comment 5:

D.3.11(b)(1)(b), This requirement is unnecessary according to Condition D.3.8 and the supporting discussion on pages 8 and 9 of the TSD. The control equipment on order does not afford Chemtrusion the ability to take this redundant reading. This condition must be removed.

Response 5:

Since Chemtrusion is not able to take a reading of cleaning cycle frequency and differential pressure, and the requirement in Condition D.3.11(b)(1)(B) is not necessary to show compliance with 326 IAC 6-3-2, the requirement is removed as follows:

- (b) To document compliance with Condition D.3.8, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) ~~Cleaning cycle: frequency and differential pressure.~~

Comment 6:

TSD Page 6, Chemtrusion requests clarification of the significance of separating PM and PM₁₀ emissions. The numbers in the original permit were assigned by the reviewer. Chemtrusion was not given and did not exercise a choice in this matter.

Response 6:

PM allowable emissions are based on 326 IAC 6-3-2, Process Operations, and PM₁₀ limitations are necessary to comply with 326 IAC 2-8, FESOP. Therefore, limitations on PM and PM₁₀ emissions are both necessary. The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. There are no changes as a result of this comment.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	Chemtrusion Indiana, Inc.
Source Location:	1403 Port Road, Jeffersonville, Indiana 47130
County:	Clark
SIC Code:	4459
Operation Permit No.:	F 019-9668-00091
Operation Permit Issuance Date:	November 9, 1998
Significant Permit Revision No.:	SPR 019-11926-00091
Permit Reviewer:	CarrieAnn Ortolani

The Office of Air Management (OAM) has reviewed a revision application from Chemtrusion Indiana, Inc. relating to the construction and operation of the following emission units and pollution control devices:

- (a) One (1) extruder, identified as EX8, with a maximum capacity of 3,300 pounds per hour, exhausting at a stack identified as E;
- (b) One (1) extruder, identified as EX7, with a maximum capacity of 12,000 pounds per hour, exhausting at a stack identified as E;
- (c) Two (2) preblending operations identified as PB 4 and PB5, each with a maximum capacity of 175 pounds of additives and pigments per hour, with particulate matter (PM) controlled a dust collector identified as PS012, exhausting at a stack identified as H;
- (d) One (1) automatic feeder system, identified as AFS2, which receives raw material as additive, pigments, polypropylene resin, rubber, and talc at a maximum rate of 75, 75, 9900, 3100 and 2100 pounds per hour, respectively, with particulate matter controlled by a dust collector identified as PS011, exhausting at a stack identified as G;
- (e) One (1) pelletizing process identified as P8, with a maximum capacity of 3,300 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D; and
- (f) One (1) pelletizing process identified as P7, with a maximum capacity of 12,000 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D.

The following insignificant activities are also being added, which are similar to existing insignificant activities and are not specifically subject to a rule:

- (a) Natural gas-fired combustion sources (space heaters) with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

- (b) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF); or
 - (2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (c) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (d) Enclosed systems of conveying plastic raw materials and plastic finished goods.
- (e) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

History

On February 23, 2000, Chemtrusion Indiana, Inc. submitted an application to the OAM requesting to add additional polypropylene resin extrusion and batch mixing equipment to their existing plant. Chemtrusion Indiana, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) on November 9, 1998.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
G	Automatic Feeder System (AFS2)	9.0	3.0	22,000	68
H	Preblend (PB4 and PB5)	26.0	1.0	1,500	68

Recommendation

The staff recommends to the Commissioner that the FESOP Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 23, 2000. Additional information was received on March 31, 2000.

Emission Calculations

See page 1 of 1 of Appendix A of this document for detailed emissions calculations.

Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls for this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	674
PM ₁₀	674
SO ₂	1.00
VOC	33.5
CO	2.00
NO _x	2.00

HAPs	Potential To Emit (tons/year)
Individual	Less than 10
TOTAL	Less than 25

Justification for Revision

The FESOP is being revised through a FESOP Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(f)(1)(E)(i) and (iv), “A significant permit revision is a modification that is not an administrative amendment under section 10 of this rule or subject to subsection (d) and includes any modification with a potential to emit greater than or equal to twenty-five (25) tons per year of particulate matter (PM) or particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM₁₀),” and “A significant permit revision is a modification that is not an administrative amendment under section 10 of this rule or subject to subsection (d) and includes any modification with a potential to emit greater than or equal to twenty-five (25) tons per year of volatile organic compounds (VOC).”

County Attainment Status

The source is located in Clark County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Clark County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	11.4
PM ₁₀	11.4
SO ₂	0.01
VOC	35.2
CO	1.30
NO _x	1.60

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is not one of the 28 listed source categories.

- (b) These emissions are based upon the emissions after controls in the Technical Support Document to F019-9668-00091, issued on November 9, 1998.

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this FESOP revision.

	Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Proposed Revision after limitations	1.74 (162)	47.8	1.0	32.2	2.0	2.0	1.0
Existing Source after revised limitations	51.2	51.2	0.01	35.2	1.30	1.60	0.25
Total	52.9 (213)	99.0	1.01	67.4	3.30	3.60	1.25
PSD or Offset Threshold Level	250	250	250	100	250	100	-

Note: PM emissions presented in this table for the proposed revision are emissions after controls. The values in parenthesis are the allowable emissions based on 326 IAC 6-3-2. The VOC emissions presented in this table result from a limit of less than 25 tons per year from extruder EX7 and the potential to emit of 7.23 tons per year from extruder EX8.

- (a) This revision to an existing minor stationary source is not major because the emission increase is limited to less than the PSD and Emission Offset threshold levels. Therefore, pursuant to 326 IAC 2-2, 326 IAC 2-3, and 40 CFR 52.21, the PSD and Emission Offset requirements do not apply.
- (b) The PM₁₀ emissions are limited to 99.0 tons per year. Limitations in the FESOP 019-9668-00091, issued on November 9, 1998 have been adjusted to allow for this modification. Therefore, this revision to the existing FESOP will **not** change the status of the stationary source because the emissions from the entire source will still be limited to less than the Part 70 major source thresholds.
- (c) The potential to emit VOC at the one (1) extruder, identified as EX7, will be limited to less than 25 tons per year. This will make the requirements of 326 IAC 8-1-6 not applicable. Compliance with this limitation will be achieved by limiting the material throughput at extruder EX7 to 49,932 tons per consecutive twelve (12) month period. Using the emission factor of 1 pound VOC per ton throughput, this will result in emissions of less than 25 tons per consecutive twelve (12) month period (49,932 tons/yr x 1 lb/ton / 2,000 lbs/ton < 25 tons/yr). Future revisions in the emission factor due to updated stack test data may result in a different required throughput rate to comply with this limitation.

- (d) This source is a minor source pursuant to 326 IAC 2-2, Prevention of Significant Deterioration, and 326 IAC 2-3, Emission Offset.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed revision.
- (b) This polypropylene extrusion process is not subject to 40 CFR Part 60, Subpart DDD, Standards of Performance for Volatile Organic Compounds (VOC) emissions from the Polymer Manufacturing Industry, because this source does not manufacture polypropylene resins.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR Part 61 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

326 IAC 2-8 (Federally Enforceable State Operating Permit)

The source will continue to be limited to less than the Part 70 permit levels. In order to do so, the PM₁₀ limits from the FESOP, F019-9668-00091, issued on November 9, 1998, are revised in this Significant FESOP revision. The source chose to limit PM and PM₁₀ emissions to the same numbers since PM₁₀ is considered equal to PM and all limitations will ensure compliance with 326 IAC 6-3-2, Process Operations. For the new proposed emission units, the PM and PM₁₀ limits will be separate. PM and PM₁₀ limitations are now as follows:

Process / Facility	Truncated PM Allowable Emissions (lbs/hr)	PM ₁₀ Allowable Emissions (lbs/hr)	Equivalent Emissions (tons/yr)
Preblending Operation (PB1)	0.37 0.22	0.37 0.22	0.96
Preblending Operation (PB2)	0.37 0.22	0.37 0.22	0.96
Preblending Operation (PB3)	0.37 0.22	0.37 0.22	0.96
Automatic Feeder System (AFS)	7.95 4.07	7.95 4.07	17.8
Pelletizing Operation (P1)	0.59 0.14	0.59 0.14	0.61
Pelletizing Operation (P2)	1.62 0.65	1.62 0.65	2.85
Pelletizing Operation (P3)	1.62 0.65	1.62 0.65	2.85
Pelletizing Operation (P4)	2.86 1.50	2.86 1.50	6.57
Pelletizing Operation (P5)	2.75 1.42	2.75 1.42	6.22
Pelletizing Operation (P6)	4.10 2.59	4.10 2.59	11.3
New Proposed Units			
Preblending Operation (PB4)	N/A	0.22	0.96

Process / Facility	Truncated PM Allowable Emissions (lbs/hr)	PM ₁₀ Allowable Emissions (lbs/hr)	Equivalent Emissions (tons/yr)
Preblending Operation (PB5)	N/A	0.22	0.96
Automatic Feeder System (AFS2)	N/A	3.88	17.0
Pelletizing Operation (P7)	N/A	5.17	22.6
Pelletizing Operation (P8)	N/A	1.42	6.22
Totals:		22.6	99.0

The potential to emit PM and PM₁₀, after controls, from the preblending operations (PB4 and PB5), the automatic feeder system (AFS2), and the pelletizing operations (P7 and P8) are less than the limited emissions listing in the table (See page 1 of 1 of TSD Appendix A). Therefore, the new proposed units will comply with these limitations.

326 IAC 6-3-2 (Process Operations)

- (a) The particulate matter (PM) from the preblending operations shall not exceed 0.80 pounds per hour, each, when operating at a process weight rate of 175 pounds per hour. Since the potential to emit before controls is 0.263 pounds per hour of PM, each, the preblending operations will comply with this rule.
- (b) The particulate matter (PM) from the automatic feeder system shall not exceed 16.0 pounds per hour, when operating at a process weight rate of 15,300 pounds per hour. Since the potential to emit after controls is 0.153 pounds per hour of PM, the automatic feeder system will comply with this rule. The dust collector (PS011) shall be operation at all times when the automatic feeder system is in operation in order to comply with this rule.
- (c) The particulate matter (PM) from the pelletizing operations, identified as P8, shall not exceed 5.73 pounds per hour, when operating at a process weight rate of 3,300 pounds per hour. Since the potential to emit before controls is 0.053 pounds per hour of PM, the pelletizing operations, identified as P8, will comply with this rule.
- (d) The particulate matter (PM) from the pelletizing operations, identified as P7, shall not exceed 13.6 pounds per hour, when operating at a process weight rate of 12,000 pounds per hour. Since the potential to emit before controls is 0.192 pounds per hour of PM, the pelletizing operations, identified as P7, will comply with this rule.

These limitations are based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
 P = process weight rate in tons per hour

326 IAC 8-1-6 (New Facilities; General reduction requirements)

- (a) The extruder, identified as EX8, is not subject 326 IAC 8-1-6 (New Facilities; General reduction requirements) because the potential VOC emissions are less than 25 tons per year.
- (b) The extruder, identified as EX7, can be subject to 326 IAC 8-1-6 (New Facilities; General reduction requirements) because the potential VOC emissions are greater than 25 tons per year. The source has agreed to limit the potential to emit VOC at the one (1) extruder, identified as EX7, to less than 25 tons per year. This will make the requirements of 326 IAC 8-1-6 not applicable. Compliance with this limitation will be achieved by limiting the material throughput at extruder EX7 to 49,932 tons per consecutive twelve (12) month period. Using the emission factor of 1 pound VOC per ton throughput, this will result in emissions of less than 25 tons per consecutive twelve (12) month period ($49,932 \text{ tons/yr} \times 1 \text{ lb/ton} / 2,000 \text{ lbs/ton} < 25 \text{ tons/yr}$). Future revisions in the emission factor due to updated stack test data may result in a different required throughput rate to comply with this limitation. Thus, the limited potential to emit VOC is less than 25 tons per year, and the requirements of 326 IAC 8-1-6 are not applicable.

No other article 8 rules apply to this source.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The automatic feeder system, identified as AFS2, has applicable compliance monitoring conditions as specified below:

- (a) Daily visible emission notations of the automatic feeder system (AFS2) stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across the dust collector (PS011) used in conjunction with the automatic feeder system (AFS2), at least once weekly when the automatic feeder system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 3.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (c) An inspection shall be performed each calendar quarter of all filters controlling the shot blasting operations when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

These monitoring conditions are necessary because the dust collector for the automatic feeder system (AFS2) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (1) Three (3) preblending operations identified as PB1 through PB3, each with a maximum capacity of 165 pounds of additives and pigments per hour, particulate matter (PM) controlled by a baghouse identified as PS010, exhausting at a stack identified as B;
- (2) One (1) automatic feeder system (AFS) receives raw material as additive, pigments, polypropylene resin, rubber, fillers at a maximum rate of 80, 80, 10450, 3215 and 2250 pounds per hour, particulate matter controlled by a baghouse identified as PS009, exhausting at a stack identified as A;
- (3) One (1) extruder identified as EX1B contains different heat zones for polymerization of raw materials, maximum capacity of 330 pounds per hour, exhausting at a stack identified as E;

- (4) One (1) extruder identified as EX2 contains different heat zones for polymerization of raw materials, maximum capacity of 1500 pounds per hour, exhausting at a stack identified as E;
- (5) One (1) extruder identified as EX3 contains different heat zones for polymerization of raw materials, maximum capacity of 1500 pounds per hour, exhausting at a stack identified as E;
- (6) One (1) extruder identified as EX5 contains different heat zones for polymerization of raw materials, maximum capacity of 3300 pounds per hour, exhausting at a stack identified as E;
- (7) One (1) extruder identified as EX6 contains different heat zones for polymerization of raw materials, maximum capacity of 6000 pounds per hour, exhausting at a stack identified as E;
- (8) One (1) pelletizing process identified as P1 with a maximum capacity of 330 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (9) One (1) pelletizing process identified as P2 with a maximum capacity of 1500 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (10) One (1) pelletizing process identified as P3 with a maximum capacity of 1500 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (11) One (1) pelletizing process identified as P5 with a maximum capacity of 3300 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents, exhausting to a stack identified as F;
- (12) One (1) pelletizing process identified as P6 with a maximum capacity of 6000 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents, exhausting to a stack identified as F;
- (13) One (1) extruder identified as EX4 contains different heat zones for polymerization of raw materials, maximum capacity of 3500 pounds per hour, exhausting at a stack identified as E;
- (14) One (1) pelletizing process identified as P4 with a maximum capacity of 3500 pounds of polymerized plastic in a water bath with a centrifugal to remove a moisture contents;
- (15) One (1) extruder, identified as EX8, with a maximum capacity of 3,300 pounds per hour, exhausting at a stack identified as E;**
- (16) One (1) extruder, identified as EX7, with a maximum capacity of 12,000 pounds per hour, exhausting at a stack identified as E;**
- (17) Two (2) preblending operations identified as PB 4 and PB5, each with a maximum capacity of 175 pounds of additives and pigments per hour, with particulate matter (PM) controlled a dust collector identified as PS012, exhausting at a stack identified as H;**
- (18) One (1) automatic feeder system, identified as AFS2, which receives raw material as additive, pigments, polypropylene resin, rubber, and talc at a maximum rate of 75, 75, 9900, 3100 and 2100 pounds per hour, respectively, with particulate matter controlled by a dust collector identified as PS011, exhausting at a stack identified as G;**

- (19) One (1) pelletizing process identified as P8, with a maximum capacity of 3,300 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D; and
- (20) One (1) pelletizing process identified as P7, with a maximum capacity of 12,000 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D.

D.1.1 Part 70 Program [326 IAC 2-7] and Process Operation [326 IAC 6-3]

Pursuant to 326 IAC 2-7 (Part 70 Program) and 326 IAC 6-3 (Process Operation), the following facilities shall have an allowable PM emission limits:

- (a) Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour, the following equation is used:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
 P = process weight rate in tons per hour

Process / Facility	Process Weight Rate (tons/hour)	Truncated PM Allowable Emissions (lbs./hr)	PM ₁₀ Allowable Emissions (lbs./hr)
Preblending Operation (PB1)	0.0825	0.37 0.22	0.37 0.22
Preblending Operation (PB2)	0.0825	0.37 0.22	0.37 0.22
Preblending Operation (PB3)	0.0825	0.37 0.22	0.37 0.22
Automatic Feeder System (AFS)	8.03	7.95 4.07	7.95 4.07
Pelletizing Operation (P1)	0.165	0.59 0.14	0.59 0.14
Pelletizing Operation (P2)	0.75	1.62 0.65	1.62 0.65
Pelletizing Operation (P3)	0.75	1.62 0.65	1.62 0.65
Pelletizing Operation (P4)	1.75	2.86 1.50	2.86 1.50
Pelletizing Operation (P5)	1.65	2.75 1.42	2.75 1.42
Pelletizing Operation (P)	3.0	4.10 2.59	4.10 2.59

The above PM emission limits shall also equivalent to PM₁₀ emission limits. Compliance with this condition will make 326 IAC 2-7 (Part 70 Program) requirements not applicable.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (15) One (1) extruder, identified as EX8, with a maximum capacity of 3,300 pounds per hour, exhausting at a stack identified as E;
- (16) One (1) extruder, identified as EX7, with a maximum capacity of 12,000 pounds per hour, exhausting at a stack identified as E;
- (17) Two (2) preblending operations identified as PB 4 and PB5, each with a maximum capacity of 175 pounds of additives and pigments per hour, particulate matter (PM) controlled a dust collector identified as PS012, exhausting at a stack identified as H;
- (18) One (1) automatic feeder system, identified as AFS2, which receives raw material as additive, pigments, polypropylene resin, rubber, and talc at a maximum rate of 75, 75, 9900, 3100 and 2100 pounds per hour, respectively, with particulate matter controlled by a dust collector identified as PS011, exhausting at a stack identified as G;
- (19) One (1) pelletizing process identified as P8, with a maximum capacity of 3,300 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D; and
- (20) One (1) pelletizing process identified as P7, with a maximum capacity of 12,000 pounds of polymerized plastic in a water bath, with a centrifugal to remove a moisture contents, exhausting to a stack identified as D.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 FESOP [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP), the PM₁₀ from the following facilities shall be limited as follows:

Process / Facility	PM ₁₀ Limited Emissions (lbs./hr)
Preblending Operation (PB4)	0.22
Preblending Operation (PB5)	0.22
Automatic Feeder System (AFS2)	3.88
Pelletizing Operation (P7)	5.17
Pelletizing Operation (P8)	1.42

Compliance with this condition will make the requirements of 326 IAC 2-7 (Part 70 Program) not applicable.

D.3.2 Process Operations [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the following facilities shall not exceed the following pounds per hour limitations when operating at the process weight rate indicated:

Process / Facility	Process Weight Rate (tons/hr)	PM Allowable Emissions (lbs/hr)
Preblending Operation (PB4)	0.09	0.80
Preblending Operation (PB5)	0.09	0.80
Automatic Feeder System (AFS2)	7.65	16.0
Pelletizing Operation (P7)	6.00	13.6
Pelletizing Operation (P8)	1.65	5.73

These limitations are based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour, the following equation is used:

$$E = 4.10 P^{0.67}$$

E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The Permittee shall limit the input of raw materials to the one (1) extruder, identified as EX7, to less than 49,932 tons per consecutive twelve (12) month period. This will limit the potential to emit VOC at the one (1) extruder, identified as EX7, to less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6, New facilities; General reduction requirements, are not applicable.

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the automatic feeder system, identified as AFS2, and its control device and the one (1) extruder, identified as EX7.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and PM₁₀ limits specified in Conditions D.3.1 and D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.6 Particulate Matter (PM)

The dust collector identified as PS011 for PM control shall be in operation at all times when the automatic feeder system (AFS2) is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.7 Visible Emissions Notations

- (a) Daily visible emission notations of the automatic feeder system (AFS2) stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector (PS011) used in conjunction with the automatic feeder system (AFS2), at least once weekly when the automatic feeder system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 3.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading. OAM, and shall be calibrated at least once every six (6) months.

D.3.9 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all filters controlling the shot blasting operations when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.3.10 Dust Collector Failure Detection

In the event that a dust collector failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-5(3)] [326 IAC 2-8-19]

D.3.11 Record Keeping Requirements

- (a) To document compliance with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of the automatic feeder system stack exhaust.
- (b) To document compliance with Condition D.3.8, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.3.9, the Permittee shall maintain records of the results of the inspections required under Condition D.3.9 and the dates the vents are redirected.

- (d) The Permittee shall keep records of the material throughput at the one (1) extruder, identified as EX7, on a monthly basis.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

The following Form is added to the permit as a result of these changes:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Chemtrusion Indiana, Inc.
Source Address: 1403 Port Road, Jeffersonville, Indiana 47130
Mailing Address: 1403 Port Road, Jeffersonville, Indiana 47130
FESOP No.: F 019- 9668- 00091
Facility: One (1) extruder, identified as EX7
Parameter: Raw material input
Limit: 49,932 tons per consecutive twelve (12) month period (VOC emissions less than 25 tons per year)

YEAR: _____

Month	This Month		Previous 11 Months		12 Month Total	
	Material throughput	VOC Emissions	Material throughput	VOC Emissions	Material throughput	VOC Emissions

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Conclusion

The construction of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 019-11926-00091.

Appendix A: Emission Calculations

Company Name: Chemtrusion Indiana, Inc.
Address City IN Zip: 1403 Port Road, Jeffersonville, Indiana 47130
FESOP: 019-9668-00091
Significant Permit Revision: 019-11926-00091
Reviewer: CarrieAnn Ortolani
Date: March 3, 2000

Process	SCC	Throughput in ton/hr	Emission Factors in lbs/ton of Product			Potential emissions (lbs/hr)		Potential emissions (tons/year)			C.E. for PM and PM10	Controlled Emissions in lbs. / hr		Controlled Emissions in tons / year		PM Allowable Emissions lbs/hr
			PM	PM10	VOC*	PM	PM10	PM	PM10	VOC		PM	PM10	PM	PM10	
Preblending Operation (PB4)	30101810	0.09	3	3	0	0.263	0.263	1.15	1.15	0.00	99.9%	0.0003	0.0003	0.001	0.001	0.80
Preblending Operation (PB5)	30101810	0.09	3	3	0	0.263	0.263	1.15	1.15	0.00	99.9%	0.0003	0.0003	0.001	0.001	0.80
Automatic Feeder System (AFS2)	30101814	7.65	20	20	0	153	153	670	670	0.00	99.9%	0.153	0.153	0.670	0.670	16.0
Extruder (EX8)	-----	1.65	0	0	1	0.00	0.00	0.000	0.000	7.23	0.0%	0.000	0.000	0.000	0.000	-----
Extruder (EX7)	-----	6.00	0	0	1	0.00	0.00	0.000	0.000	26.3	0.0%	0.000	0.000	0.000	0.000	-----
Pelletizing Operations (P8)	30101821	1.65	0.032	0.032	0	0.053	0.053	0.231	0.231	0.00	0.0%	0.053	0.053	0.231	0.231	5.73
Pelletizing Operations (P7)	30101821	6.00	0.032	0.032	0	0.192	0.192	0.841	0.841	0.00	0.0%	0.192	0.192	0.841	0.841	13.6
Totals:						154	154	674	674	33.5		0.398	0.398	1.74	1.74	

* - Average Emission FactorBased on Cast Film Extruder @ 470F, 40% capture from hood.

Methodology

Methodology same as that used in Appendix A to the TSD of FESOP 019-9668-00091

All Emission Factors are taken from similar processes.

Potential Emissions = (E.F. in lb./ton)* (throughput in ton/hour) * 8760 hrs/yr / 2000 lbs/hr

Controlled Emissions = Potential Emissions * (1-controlled efficiency)

E.F.. for Raw Material Unloading are based on the SCC: 30500707 & 30501222. MSDS for PVC Manufacturer shows that the material will be either in pellets or powder form.

Extruder VOC average E.F.from State of Wisconsin DNR Stack Test Results Summary sent to SPI. dated 12/5/1997

PM Allowable emissions (lbs./hour) = 4.10 (P)^0.67, P = Process weight Rate in tons per hour as 326 IAC 6-3 (Process Operations)